Chemical & Detergent Suicides

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DETERGENT SUICIDE

Detergent suicide is a newer method of committing suicide that appears to be gaining in popularity. According to reports suicide rates are on the increase. One method that appears to be on the rise is the use of common house hold chemicals to make a lethal gaseous combination.This combination of ingredients yields Hydrogen Sulfide Gas (H2S).

This new method can clearly be traced back to Japan. At least 500 Japanese men, women and children took their lives in the first half of 2008 by following instructions posted on Japanese websites, which describe how to mix bath sulfur with toilet bowl cleaner to create a poisonous gas. The method has been able to gain popularity due to the internet.

DETERGENT SUICIDE

Police, Fire, and EMS should be aware that these suicides typically take place in a confined space like a vehicle , closet or small bathroom. The subject usually places the chemicals in the bucket and mixes the combination together. As the mixture is combined it releases the Hydrogen Sulfide Gas.

In some cases the subject places bio-hazard signs around the vehicle to warn responders. Subjects have also placed duct tape or similar material around the windows and vents to contain the gas.

Recent Reported events in the US and Canada

26 Aug 2008	Pasadena, California
24 Dec 2008	Bartow, County, Georgia
10 May 2009	Toronto, Canada
14 May 2009	Ada County, Idaho
15 Dec 2009	Gwinnett County, Gorgia
12 Feb 2009	San Jose, California

Hydrogen Sulfide

- Toxic gas
- Usually encountered in confined space rescue
- Colorless gas
- Immediately Dangerous to Life and Health (IDLH) level of 100 parts-per-million
- NFPA 704 Health Risk rating of 4
- Respiratory hazard

Exposure	Parts Per Million (ppm)	Physical Effect
Low Level	< 40 ppm's for less than 15 minutes	Eye and mucous membrane irritation
Moderate Level	> 20 ppm	Pulmonary membrane irritation
High Level	50 – 400 ppm	Cough, dyspnea, cyanosis and confusion
Severe – High	>500	Fatal systemic toxicity

At 700 ppm just 2-3 breaths can cause immediate death

Typical Chemicals Used

Acid Sources

- Muriatic acid
- Sulfuric acid
- Lysol disinfectant
- Lysol toilet bowl cleaner
- The Works toilet bowl cleaner
- Blu-lite Germicidal acid bowl cleaner
- Kaboom Shower, Tub and Tile cleaner
- Tile and Stone cleaners

Sulfur Sources

- Artist oil paints
- Dandruff shampoos
- Pesticides
- Spackling paste
- Latex paints
- Garden fungicides
- Lime Sulfur
- Bonide

Warning Signs / Vehicle

- Subject appears unconscious and unresponsive
- Tape over vents and windows
- Suicide note
- A posted note to warn rescuers of present danger
- Bucket , pail , pot or cooler in the vehicle containing chemicals
- Empty containers of chemicals in or around the vehicle
- Smell of rotten eggs

Response to Detergent Suicide in a vehicle

- Survey the scene
- Survey the inside of the vehicle
- Determine responsiveness of subject
    - Conscious or unconscious
    - Appears to be breathing – chest rise and fall
- If the subject is conscious can they open the door and exit the vehicle. Have the subject walk / crawl away from vehicle to fresh air.
- Be careful when treating the patient due to the off gassing from the subjects clothing and exhaled breaths.
- If the subject is unconscious and there is no apparent breathing for 30 seconds to a minute stand by for Haz-Mat and back away from the vehicle. **Follow state and local protocols**

Treatment once removed from vehicle or residence

- Access Airway – Breathing – Circulation
- Ideally – rescuer's in proper PPE should provide a patient assessment and remove the patients clothing and double bag it
- Check for respiratory effort and rate and assist with ventilations as needed. 100% Oxygen would be recommended
- Check for pulse and if available place the patient on the monitor and evaluate the rhythm
- Attempt venous access
- Attach pulse oximeter
- When possible attempt to do as much as possible enroute to the appropriate hospital

Always follow state and local medical protocols

Response to a detergent suicide in a dwelling

- Any outward visual signs as you approach the residence or apartment building
    - Signs posted on the front of the house
    - Other persons from inside the house complaining of difficulty breathing
    - The smell of rotten eggs or sewer gas in the area and gets stronger as you approach the target residence
    - Be prepared to evacuate the residence or apartment building

The following exchange was taken off a website that was discussing what chemical should be used and how to calculate the mixture!

You can find a good amount of the sulfur component needed for your “stink bomb” here: (http://store.bestsaltlamp.com/blmblk.html
Remember that a 1% concentration results from adding 1.28 ounces of this particular bath salt per gallon of water. Do the math, and a 2lb bag will get you a gallon of water with a 25% concentration of sulfur bath salts.A matching concentration/volume (about 25%/gallon) of the hydrochloric acid component can be achieved from about 5 24oz bottles of “The Works” brand toilet cleaner. (Available to purchase anywhere, but it’s very inexpensive here: http://www.hectorshardware.biz/shop/product.asp?dept_id=100103&sku=620920)

ALSO: be aware that in high concentrations/volumes, this gas (H2S) is often flammable. This gas can disable your sense of smell upon even one inhalation, thus making it even more dangerous to yourself.. or, if I read between the lines of your question: YOUR NEIGHBORS. If you’re going to “stink bomb” yourself into oblivion… I suggest you take it outside (car, refrigerator box, etc), or devise a way to concentrate and administer a much smaller amount via garbage bags and a hose. Also remember that someone who wants to live is going to have to clean up your little mess, so a great deal of highly visible signage indicating the presence of H2S gas would be the polite thing to do….
Happy afterlifing, dumbasses.

The following exchange was taken off a website that was discussing what chemical should be used and how to calculate the mixture!

ACID SOURCE

****The Works(R) Toilet Bowl Cleaner (15-25 percent HCl)**** This is the most easiest to obtain. Coooooooooool!!!!!!!! *You can use about35% sulfuric acid(H2SO4) of a car battery electrobath. **

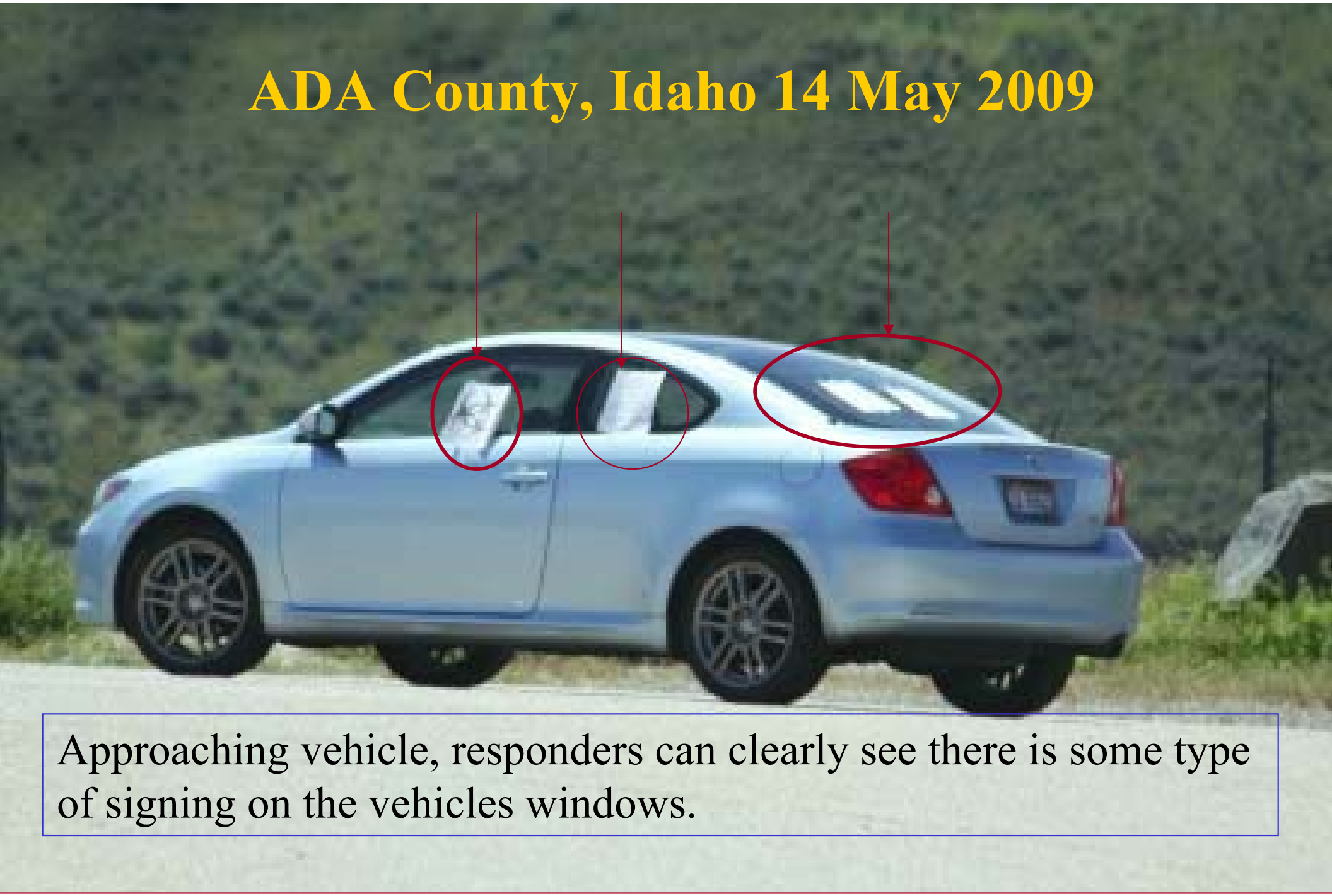
SULFUR SOURCE

Pesticides (5-30 percent calcium polysulfides)* BONIDE(R) Lime Sulfur Spray http://www.bonideproducts.com/products/product.php?category_id=325&sku=325 is the most famous and is the most easiest to obtain. Coooooooooool!!!!!!!!**BONIDE Lime Sulfur Spray contains 28% calcium polysulfide.*In U.S.A. you can search for the nearby retail stores which sell BONIDE Lime Sulfur by inputting 5-Digit Zip Code. http://www.bonideproducts.com/dealer_locator/

**When the Lime Sulfur of other brands is used, let's confirm the density is 20% or more in MSDS. [Suicidal poisoning due to hydrogen sulfide produced by mixing a liquid bath essence containing sulfur and a toilet bowl cleaner containing hydrochloric acid] http://www.ncbi.nlm.nih.gov/pubmed/18516944

To examine the amount of hydrogen sulfide produced, small portions of these liquids were mixed in a 560-mL volume flask. The results showed that 0.1 mL of each liquid produced 4,950 ppm of hydrogen sulfide, and 0.2 mL of each produced 10,800 ppm. According to these results, if the cabin volume is assumed to be 3,300 L, mixing 120 mL of each liquid produces a lethal level of hydrogen sulfide, i.e., 1,000 ppm. **Toilet bowl cleaner used for suicide in Japan is containing 9.5% HCl. It is equal Lysol(R) Toilet Bowl Cleaner (9.5 percent HCl). Liquid bath essence "610HAP" used for suicide in Japan is containing about 20%-25% calcium polysulfides. It is equal Pesticides lime sulfur.**

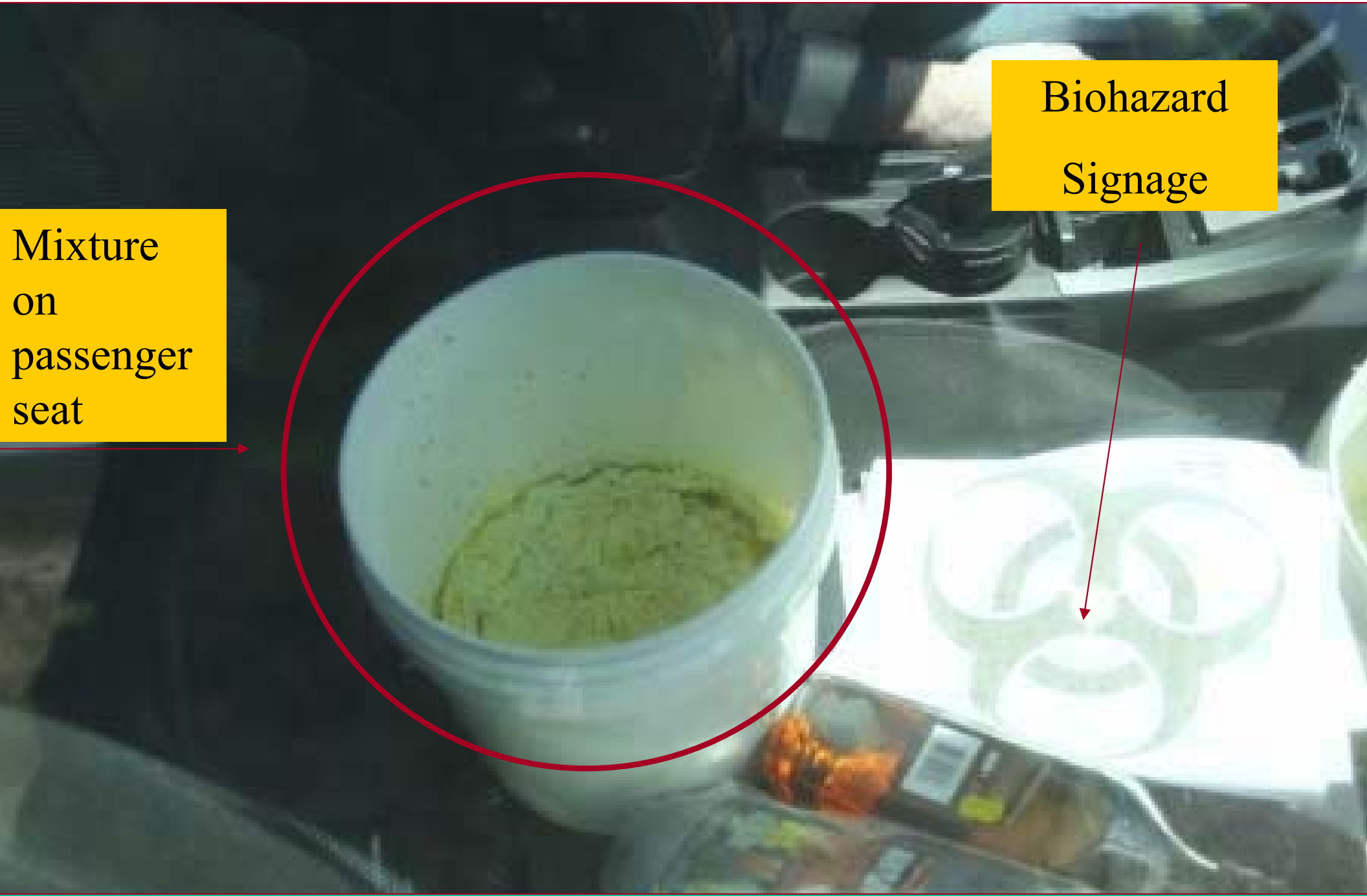
ADA County, Idaho 14 May 2009



Approaching vehicle, responders can clearly see there is some type of signing on the vehicles windows.

What if the approach was at night would the signage still be clear?

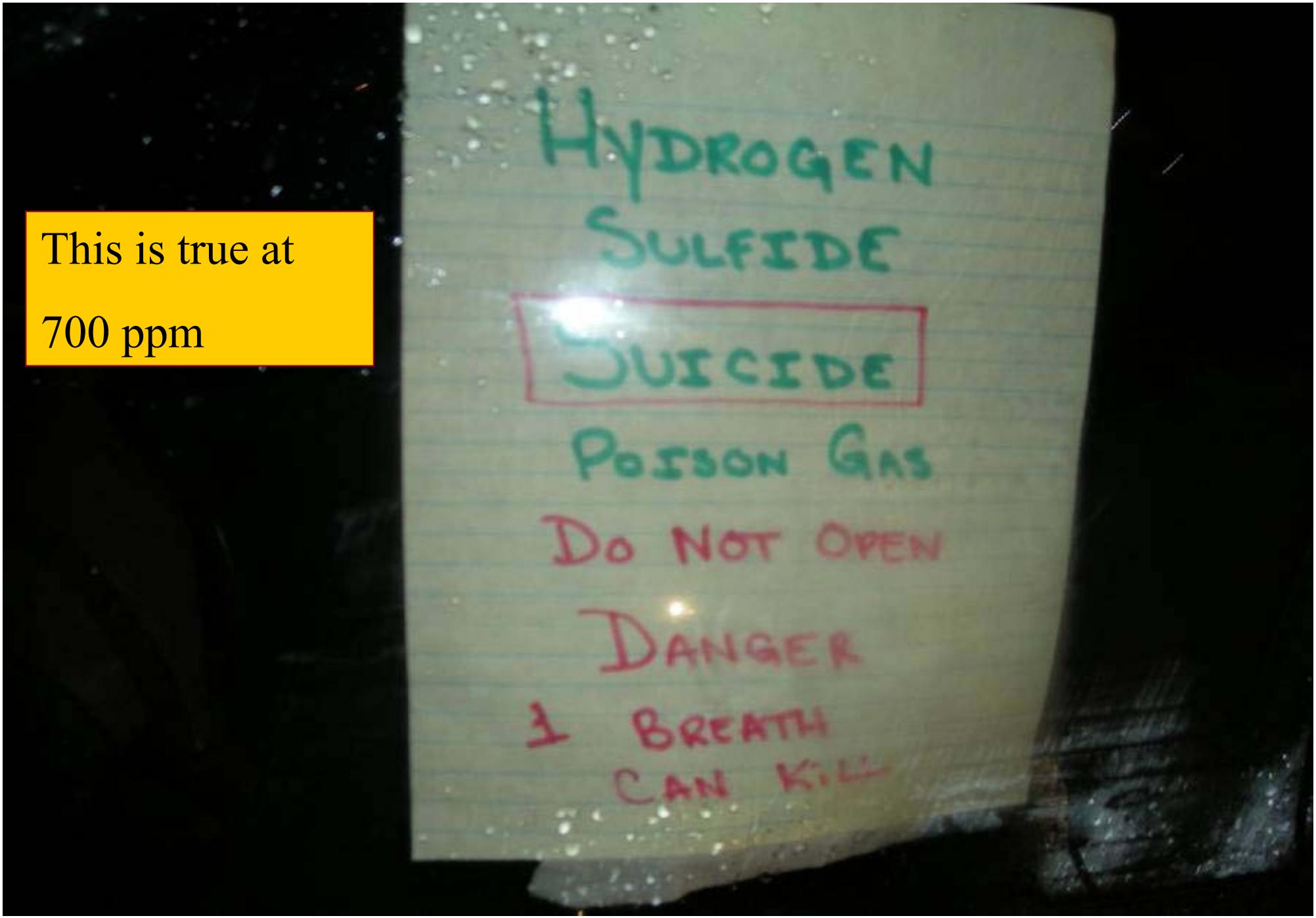

FF in proper PPE
Patient on evaluation is unconscious and unresponsive



Be aware of the foul smell of sewer gas or rotten eggs as you approach

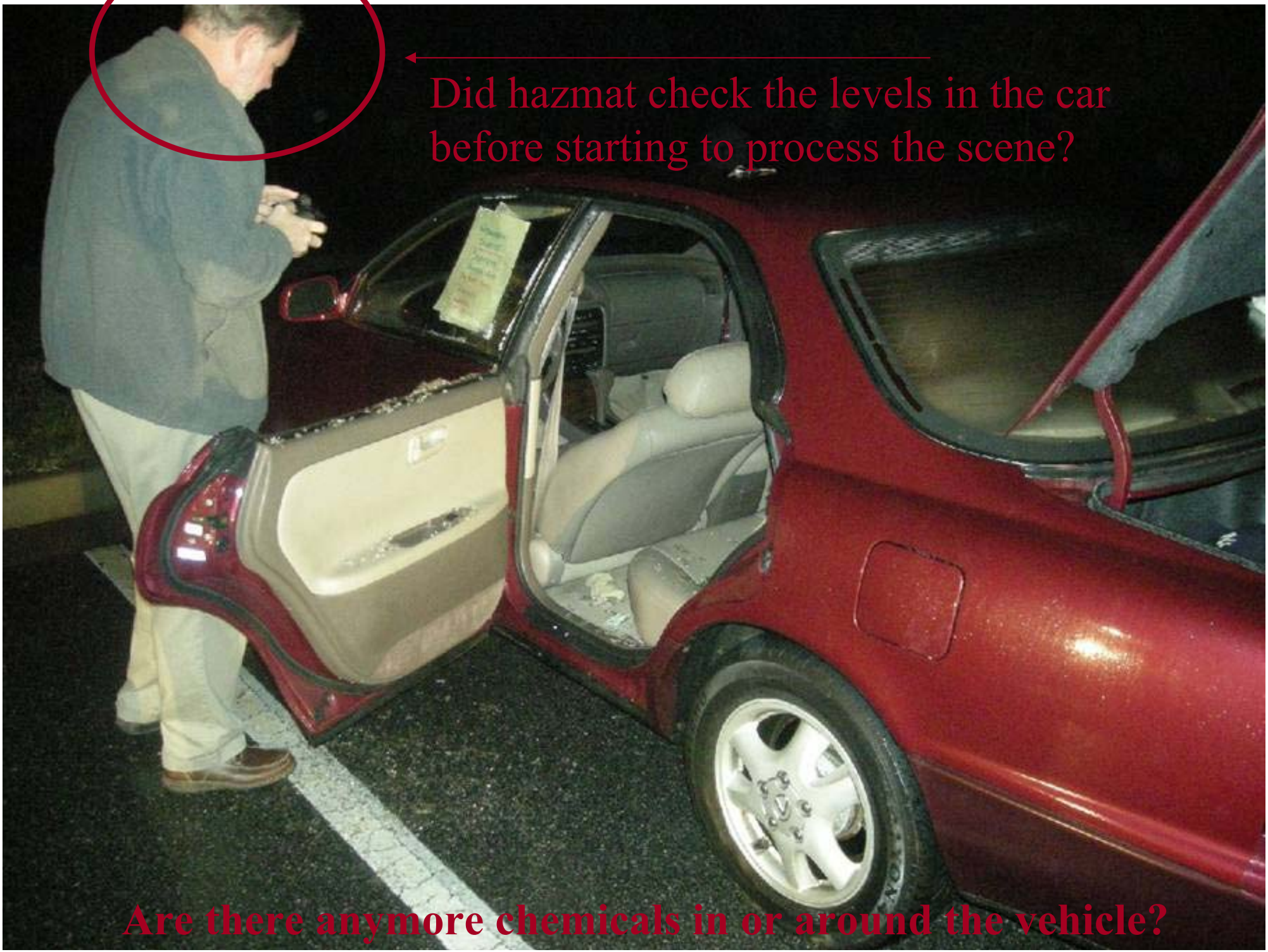

Conscious/Unconscious
Responsive/Unresponsive
Chest Rise Yes/NO
Skin Color
Signs of foul play

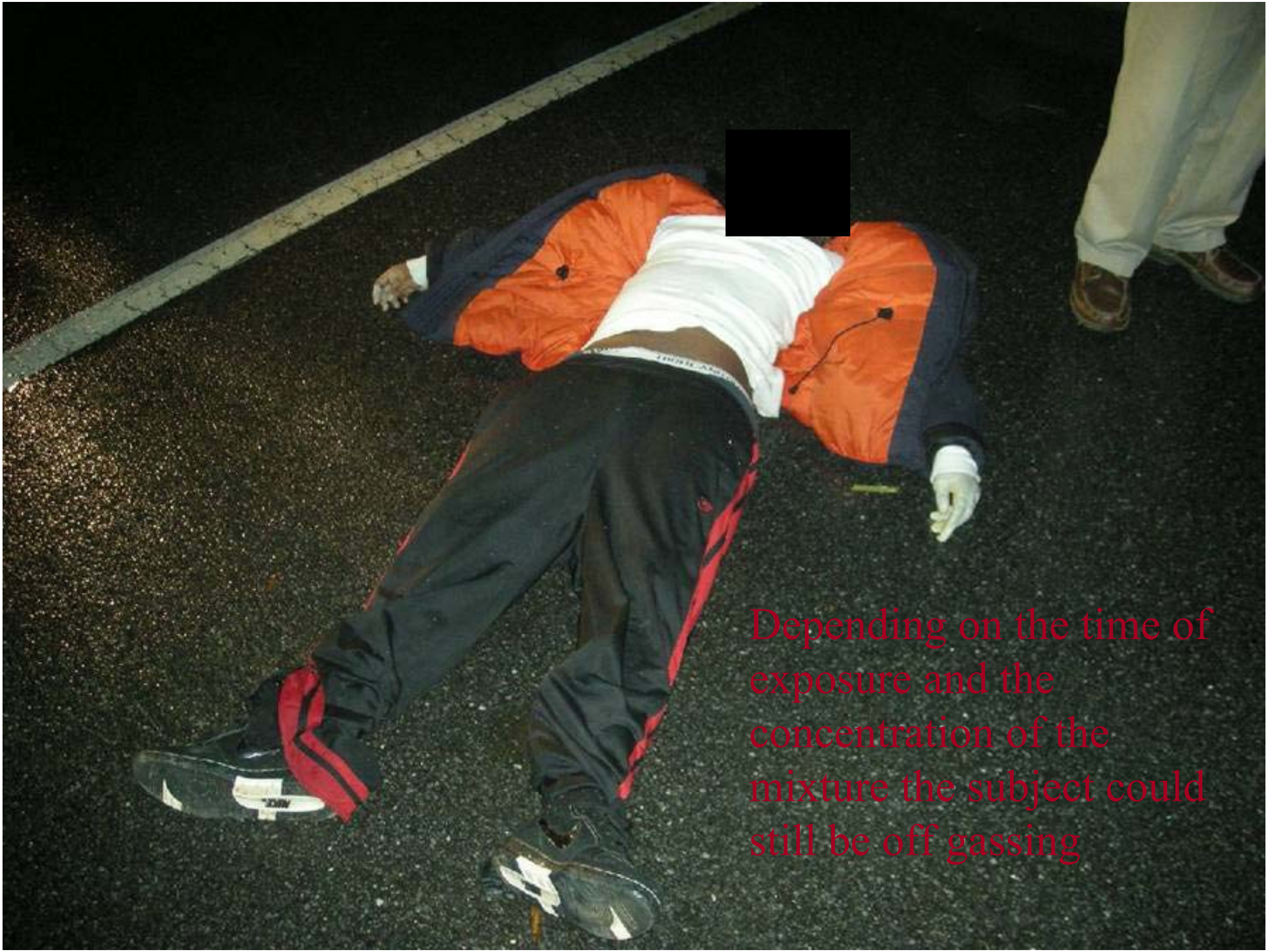
Containers of chemicals removed from vehicle. More than enough to do the job.

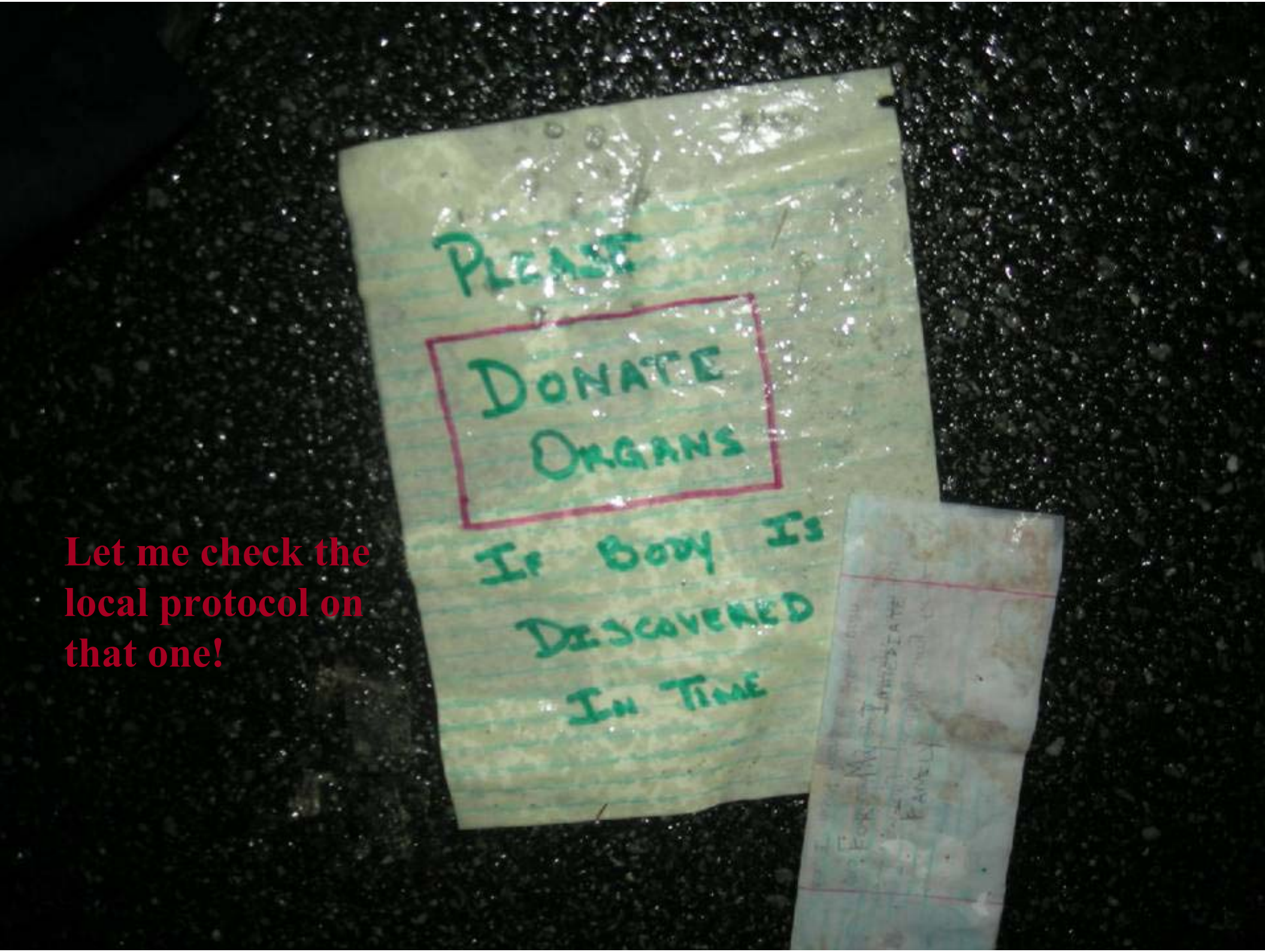


This is true at

700 ppm


Did hazmat check the levels in the car before starting to process the scene?
Are there anymore chemicals in or around the vehicle?


Depending on the time of exposure and the concentration of the mixture the subject could still be off gassing



Let me check the local protocol on that one!

These are the chemicals and containers that the subject from the previous slide used.

Practice versions of the note on the window


This subject committed suicide mixing cyanide and an acid
KGTV
NEWS

Resources

http://msds.chem.ox.ac.uk/HY/hydrogen_sulfide.html

http://www.wired.com/threatlevel/2009/03/japanese-deterg

http://www.kctv5.com/print/22033404/detail.html

ADA County Sheriffs Office

Toronto EMS

http://firechief.com/hazmat/ar/detergent-suicide-alert-20090914